

ABSTRACT

The present invention is a method and system for receiving data transmitted using block space time transmit diversity (BSTTD) in a code division multiple access (CDMA) communication system. The system comprises a transmitter, for transmitting a first data field using a first antenna and a second data field using a second antenna, and a receiver. The receiver includes an antenna for receiving the first and second transmitted data fields, and a BSTTD joint detector which determines symbols of the first and second transmitted data fields using a minimum mean square error block linear equalizer model and an approximated Cholesky decomposition of the model.